

20. (New) The detector of claim 19, wherein the plates are configured such that the magnetic flux is concentrated on the ends of the plates.

21. (New) The detector of claim 19, wherein the magnets are configured such that the magnetic flux is concentrated on the ends of the plates.

22. (New) The detector of claim 19, wherein the magnets are positioned with alternating polarity such that the magnetic flux is concentrated on the ends of the plates.

23. (New) The detector of claim 22, wherein the alternating polarity of the magnets is expressed on the circular periphery.

24. (New) The detector of claim 23, wherein the circular periphery is the outer circular periphery.

25. (New) The detector of claim 19, wherein the magnets are positioned in magnet pairs, the pairs having equal polarity such that the magnetic flux is concentrated on the ends of the plates.

26. (New) The detector of claim 25, wherein the magnet pairs are positioned to form a single magnetic pole.

27. (New) The detector of claim 19, wherein the plates are provided in the form of a disk in which adjacent plates are separated by at least one radial groove formed on the disk, and wherein the magnetic flux is concentrated on both sides of at least one of the at least one radial groove.

28. (New) A magnet pole position detector for a rotor that has a plurality of rotating magnets disposed on a circular periphery, the detector comprising:

plates of the same number as the magnets, the plates being made of a magnetic material, each of the plates being disposed on the rotor at a position along a circular path nearby a corresponding magnet and magnetized by leakage flux on the corresponding magnet; and

a magnetic sensor adapted to output a signal in response to a variation of a magnetic flux density on the circular path; wherein  
the detector is configured such the output signal undergoes a sharp variation as the plates rotate.

29. (New) The detector of claim 28, wherein the detector is configured such that the sharp variation comprises a variation from a positive value to a negative value.

30. (New) The detector of claim 28, wherein the detector is configured such that the output signal has a maximum positive value when facing the end of a plate corresponding to the north pole of a magnet.

31. (New) The detector of claim 30, wherein the detector is configured such that the output signal has a maximum negative value when facing the end of a plate corresponding to the south pole of a magnet.

32. (New) The detector of claim 31, wherein the detector is configured such that a maximum positive value and a maximum negative value is obtained within about  $4^{\circ}$  or less of magnet rotation.

33. (New) The detector of claim 31, wherein the detector is configured such that a maximum positive value and a maximum negative value is obtained within about  $2^{\circ}$  or less of magnet rotation.